

51.2.2

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ELI LILLY INDUSTRIES, INC.
MAYAGUEZ CHEMICAL PLANT

SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN.

I. Introduction

Eli Lilly Industries, Inc., in Mayaguez, Puerto Rico, has developed this plan because we recognize the necessity of preventing pollution to the waters in our surroundings.

II. Present Facilities

We have made the following provisions in our Plant design and operations to prevent spills into the nearby water bodies.

- A. Our Plant facilities are completely surrounded by a Cyclone fence, very well lighted, and patrolled by guards during nonoperating hours.
- B. All storage tanks and fuel oil tanks are surrounded by concrete dikes to hold full tank capacity and in accordance with E. P. A. recommendations.
- C. All storage tanks have level indicators for monitoring continuously the tank volume. In the North side of PM-8 there is a display panel where the volumes of all PM-8 tanks are monitored. Also a digital monitor has been installed in the Production Office. Other storage tanks have monitoring stations at the tank area.
- D. The dikes in PM-8 have concrete floors and a catch basin in it to collect spills. This prevents ground contamination.
- E. Any overflow from the Tank Farm area (PM-8) after collected in the concrete basin, is checked and finally pumped to a waste holding tank for burning or to the Waste Treatment or to a holding tank for recovery.
- F. All dike areas have drain valves which are kept closed until the Warehouse Supervisor, Production Supervisor and Waste Treatment Department Supervisor, agree to open them. This is done after the spill is checked and identified.
- G. Any spill in the PM-8 solvent unloading area drained to a concrete dike where finally is pumped to the spill control tank. From there the liquid can be sent to the Waste Treatment Plant, the incinerators or a holding tank for recovery.
- H. Our procedure requires that when a truck is unloaded, at least one of the Warehouse Operators be present at all times in the loading area.

- I. A production operator reviews the inventory of liquids in the storage tanks with a flash point lower than 100°F daily. other liquids are reviewed every other working day.
- J. Any spill in the production buildings can be collected into the storm sewer system. This system has a 12,000 gals. tank where the spill can finally be disposed, either on the waste treatment plant, or pumped for burning or recovery. PM-6 (our major production building) has a main pipe which connects to all the process vents and finally discharges into the spill control tank.
- K. Equipment available:
 1. Pumps to collect the spill
 2. Storage tank for storing spill
 3. Flexible hoses and couplings
 4. Dicasorb to absorb minor spills
 5. Industrial Spillage kit

III. Spill Potential Areas:

- A. The potential exists that the rupture disk on certain tank reactors in Bldgs. PM-3 and PM-13 may blow out and discharge solvent to the stream because some spills on the roof of the buildings flow directly to the storm sewer system. This will be an instantaneous flow due to a blowout and the maximum quantity that can be discharged is 2,000 gallons. See second paragraph, part D for storm sewer containment.
- B. The potential exists that a tank containing kerosene, fuel oil, or some other oil tank in Tank Farm area (PM-8) may overflow due to malfunction of the tank metering system. This spill would depend upon the pumping capacity which ranges from 30 to 120 GPM. The maximum quantity that could be discharged to this system is everything fails is 12,000 gallons.
- C. A remote potential exists that a fuel oil spill may be caused from a tank rupture or leakage. The spill will be collected in the area and then directed to concrete catch basin or to a holding tank for recovery. The maximum quantity which could be discharged is equal to the tanks volume ranging from 5,000 gallons to 50,000 gallons. The rate of flow would depend upon the dimension of the rupture.
- D. The potential exists that a spill of oil in the PM-8 loading area may be caused from a truck tank hose rupture or leakage. The drainage system of the tank unloading areas will flow into a concrete catch basin designed to retain it and then the spilled material can then be pumped to a waste holding tank for burning or to the waste treatment plant for treatment or to a holding tank for recovery. The maximum quantity which could be discharged is equal to the truck volume ranging from 2,000 to 10,000 gallons. The rate of flow would

depend upon the dimension of the rupture. At the power now any spill can be collected in the dike provided for the oil storage tanks and unloading areas. If for any reason the above-mentioned system fails to work as required, and the spill would reach the river. The new waste treatment facilities have a storm water pump station which has a storage capacity of 12,000 gallons and two 500 GPM pumps which discharge into a storm water holding basin with a holding capacity of 30,000 gallons. This contained spill would then be slowly added to the waste treatment system for biological treatment prior to discharge, or pumped to the incinerator for burning.

IV. Testing for Tank Integrity:

Aboveground fuel oil and kerosene tanks will be subject to periodic integrity testing.

- A. The production operator who reviews the inventory of liquids in the storage tanks must make a visual inspection of all storage tanks and inform immediately of any signs of deterioration or leaks which might cause a spill or accumulation of oil and solvent inside a dike area.
- B. All oil storage tanks must be subject at least once every two years to a nondestructive shell thickness testing.
- C. All tank supports and foundations must be included in these inspections.
- D. Records of the above-mentioned inspection must be kept at the engineering department office.

V. Facility Transfer Operations:

- A. All transfer operations are done by means of an overhead pipe arbor having a height of 18 feet above ground.
- B. When a pipeline is not in service or in stand-by service for an extended time the terminal connection at the transfer point should be blank flanged or capped, and marked as to origin.
- C. Pipe supports are properly designed to minimize abrasion and corrosion.
- D. All aboveground valves and pipelines are subjected to regular examination by production and maintenance personnel at which time the general condition of items, such as flange joints, expansion joints, valve gland and bodies, catch pans, pipeline supports, locking of valves and metal surfaces are assessed.
- E. Pressure testing is done on all new installed piping, and on any modification or different use of a pipe system.

- F. In those areas outside the production buildings in which a failure might lead to a spill event, pressure testing of all piping is done at least once every two years.

Facility Tank Truck Unloading Rack:

- A. Unloading area drainage flows into a catchment basin in which spill is pumped to the proper area for treatment as specified in Section III-D.
- B. A physical barrier is provided to prevent vehicular departure before complete disconnection of flexible transfer lines.
- C. Prior to filling and departure of any tank truck, the lower-most drain and all outlets of such vehicles should be closely examined by the warehouse operator for leakage, and if necessary, tightened, adjusted, or replaced to prevent leaks while in transit.

VII Action Plan:

A. Spill Reporting

An important part of spill control is prompt reporting. There should be no delayed reporting of spills. Operators, mechanics, and other plant personnel must report IMMEDIATELY any spill.

Following is an outline of individual responsibilities for the containment and cleanup of spills:

1. Definitions of Major Spill and Minor Spill

- a. Major Spill - A major spill is defined as one resulting in an obvious potential hazard of fire or personnel injury or as a spill which will reach the storm sewer catch basin or manhole and then the river. Normally, a spill of ten (10) gallons or more and meeting the above criterial is considered a major spill.
- b. Minor Spill - A minor spill is defined as one that is of a minimal potential fire or personnel hazard or as a spill which will not enter a storm sewer, catch basin, or manhole.

2. Responsibility When a Spill Occurs

The primary responsibility for containment and cleanup of a spill rests with the supervision of the area in which the spill occurred.

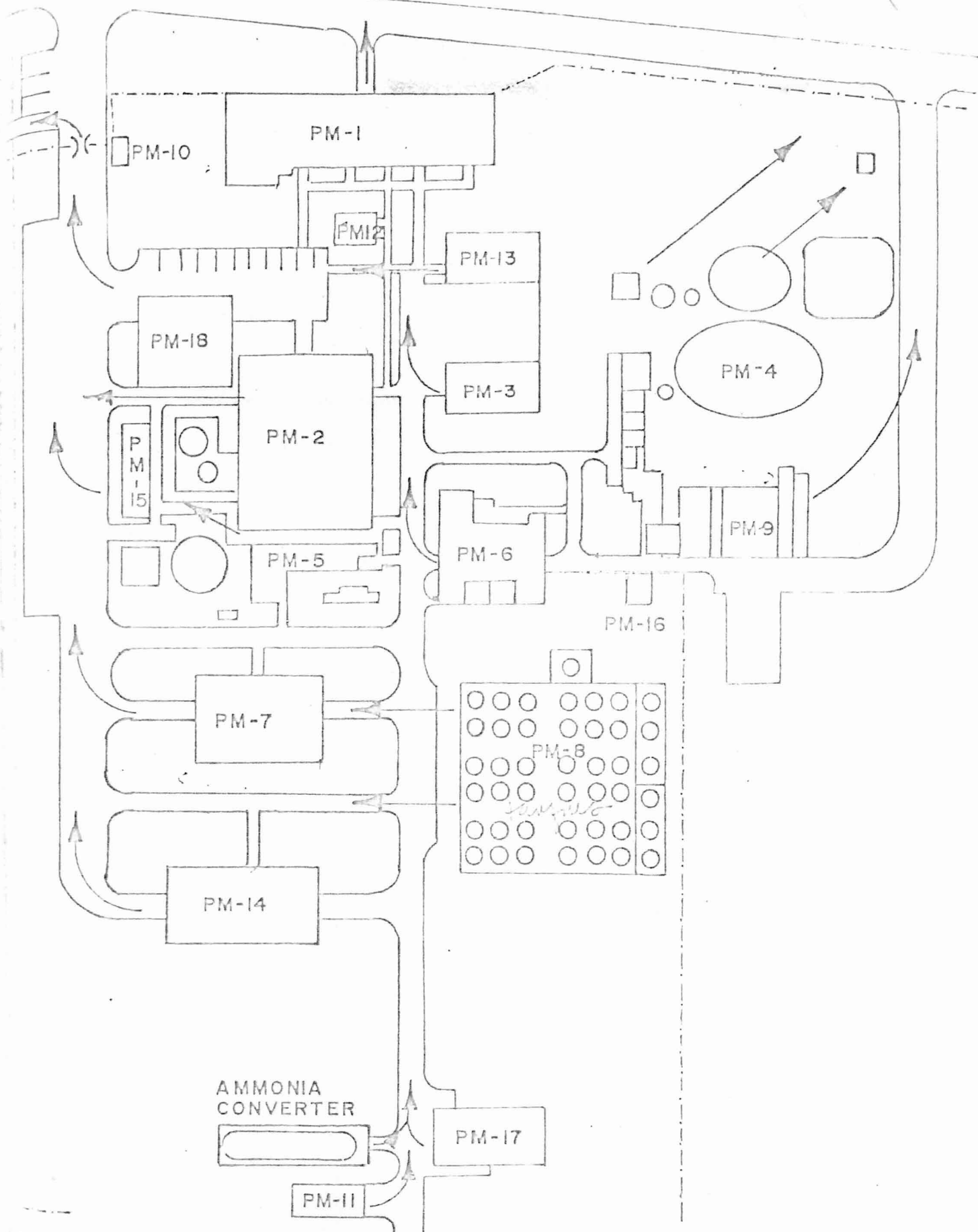
3. Procedure for Handling a Spill

- a. The person causing or reporting the spill must immediately call and contact the supervisor of the area in which the spill occurred. He should indicate the area in which the spill has occurred, whether it is continuing, and the approximate amount. The supervisor of the area should immediately call his department head or manager or the Department Head of Waste Treatment to inform them of the spill. If it is a major spill they should report immediately to the Director.
- b. After following procedures outlined in Part 3a, the operator causing or reporting the spill should immediately take any action (if it does not involve any potential personal hazard) necessary to contain the spill or to prevent it from entering a storm sewer, manhole and catch basin.
- c. The supervisor of the area should report IMMEDIATELY to the area of spill. He must find out what material has been spilled and the amount. In coordination with the Department Head of the Waste Treatment Plant, they decide the disposition of the spilled material. Depending on the type of spill, the supervisor should obtain the necessary equipment to collect the spill.
- d. It is the responsibility of those persons working in the area in which the spill occurred, to work with maintenance personnel in containing and cleaning the spill.
- e. After the spill has been contained and cleaned up, it is the responsibility of the supervisor of the area to inform his department head or manager and they will report to the Director.

	<u>Ext.</u>	<u>Telephone</u>
i. F. Belgodere	201	833-3708
ii. J. Casiano	235	833-7958
iii. V. Díaz	228	826-2039
iv. C. Medina	212	823-3105
v. C. Postigo	204	833-3678

- f. It is the responsibility of the department head or manager of the area to complete a "Spill Report" (See Attachment 1). Send a copy to the General Manager, circulate a copy to the Management and send another for file at the Engineering office.
- g. It shall then be the responsibility of the Engineering Department Head, as required by regulations, to report to the Environmental Quality Board or the Coast Guard. This report will be done only in case the spill gets into the Añasco River.

NOTE: If a minor spill occurs inside a building and goes to the regular Waste Treatment system, it is not necessary to fill out a "Spill Report" form. However, the supervisor of the area, in which the spill occurred, should report all spills to the Waste Treatment Plant Department Head, in case special handling must be given to the spill (waste material).



LILLY IND. MAYAGUEZ PLANT

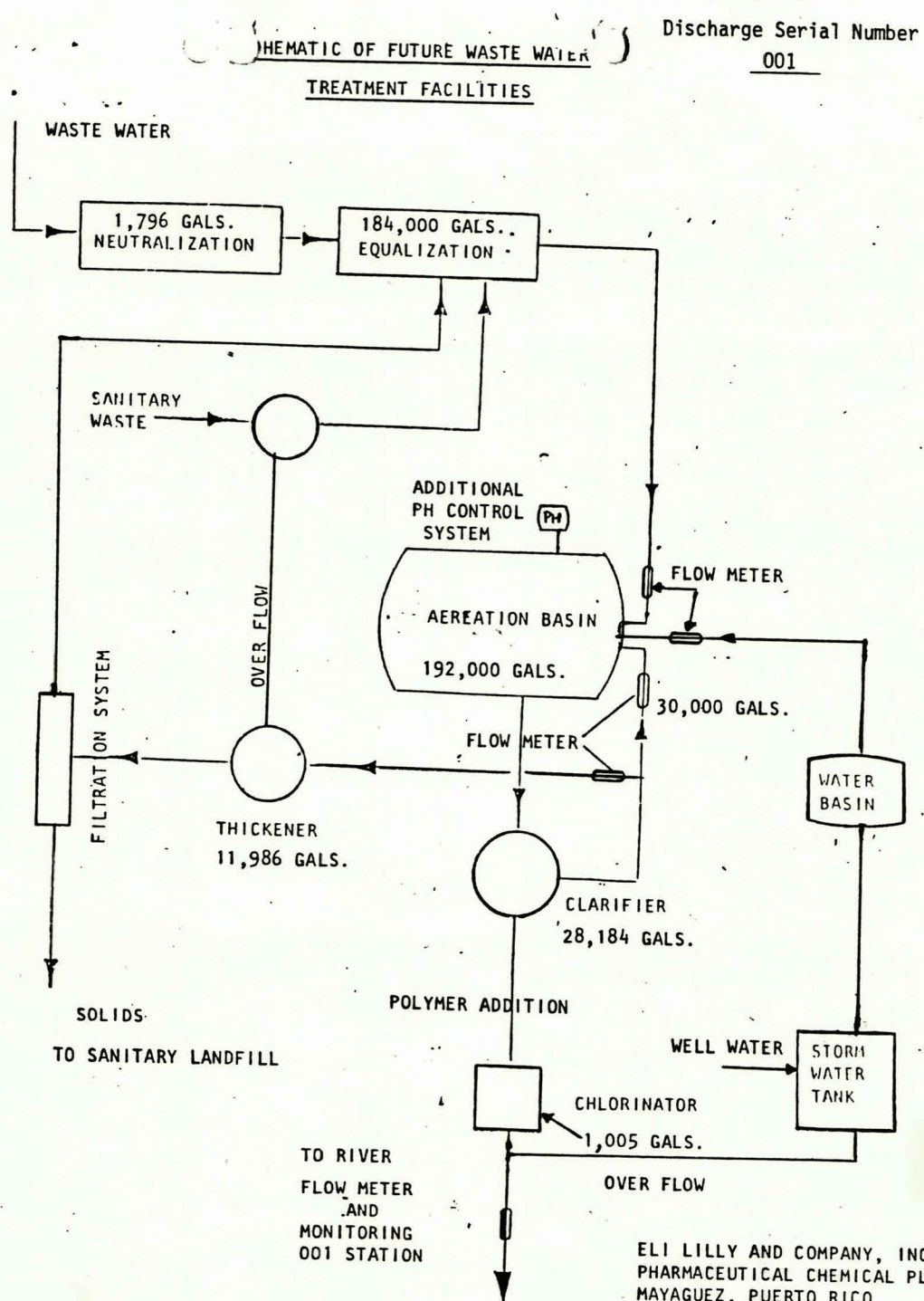
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ELI LILLY AND COMPANY, INC.
PHARMACEUTICAL CHEMICAL PLANT
MAYAGUEZ, PUERTO RICO
JULY 6, 1979
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Figure 2 WWTP Flow Diagram

likely than general corrosion, which means a corrosion rate below 5 mills per year. The tanks are inspected with an ultrasonic detector. Minimum thicknesses are verified using this device, at multiple points on each tank. At least four points are tested at right angles at the upper section of the tank (weakest part of the tank 1/4" thick) and four points at right angles close to the bottom of the tank, where the maximum pressure is exerted by the liquid. Visual inspection of tank internal surfaces is the best method for detecting localized corrosion. When required, localized repairs have been accomplished considerably in advance of the time when a significant leak or tank failure was likely. These inspections, which are conducted for each tank at least once every year provide continuing assurance that tanks storing hazardous liquid wastes remain in good condition and in compliance with design standards. The expected life of these storage tanks is 15 years.

D-2(c): Tank Management Practices (122.25(b)(2)(iv); 122.15(b)(2)(v), 264.192(b))

Controls are provided to prevent inadvertent overfilling of hazardous liquid waste storage tanks. Tanks which receive materials directly from manufacturing processes are equipped with piping at the top of the tanks which will divert waste to an adjacent tank to prevent overfilling. Since all wastes stored are compatible, transfers from one tank to another will not result in mixing of incompatible wastes. Tank levels of all hazardous waste

I-1f: Extension of Closure Time (264.113(a); 264.113(b))

The Mayaguez Plant can conform to the prescribed time table.
Therefore, this section is not applicable.

I-2: Postclosure (Reserved)

Not applicable.

I-3: Closure Cost Estimates (122.25(a)(15); 264.142)

The estimated closure cost for Mayaguez hazardous waste storage and treatment facility is \$ 415,000.00 based on 1987 costs. Specific estimates of closure costs are as follows:

I. Operation to Incinerate the Inventory

A. One (1) Eli Lilly operator for 15 days	\$ 3,600.00
B. Kerosene to burn 48,000 gallons	\$ 14,850.00
C. Transportation charges to ship about 180,000 gallons of rinse water to Clinton (SS Tank Trucks)	
Estimate Cost per truck \$4,500 from Mayaguez to Clinton Indiana	\$ 247,500.00
Total Shipment Cost	
Total I:	\$ <u>265,950.00</u>

II. Cleaning the Equipment

- A. Incinerator
Brule:

Hydroblaster pump	10 hours	\$ 350.00
2 operators	10 hours	250.00
1 supervisor	10 hours	<u>150.00</u>
		<u>750.00</u>

B. Ancillary Equipment - Cooling
Tower and Scrubber

Hydroblaster pump	6 hours	200.00
2 operators	6 hours	<u>150.00</u>
		<u>\$350.00</u>

C. Storage Tanks (4)

Hydroblaster pump	65 hours	2,200.00
2 operators	65 hours	1,600.00
Supervisor	65 hours	890.00
		<u>\$4,690.00</u>

D. Dikes

Hydroblaster	3 hours	100.00
Operator	3 hours	75.00
Supervisor	3 hours	40.00
		<u>\$215.00</u>

E. Pumps, Valves, Lines, etc.

Hydroblaster pump	8 hours	270.00
2 operators	8 hours	195.00
Supervisor	8 hours	110.00
		<u>\$575.00</u>

Total II	<u>\$6,580.00</u>
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III. Demolished Equipment Operation

A. Incinerator

Crane 18 tons, 2 days	850.00
5 laborers, 4 days (192 man hours)	2,550.00
	<u>\$3,400.00</u>

B. Packing and Cleaning of Refractory
and tower

1.	Refractory demolition		
	4 laborers, 3 days (96 man hours)	1,530.00	
2.	Triple rinse of refractory (material exposed to the waste)		
	Hydroblaster pump	40 hours	1,360.00
	2 operators	40 hours	975.00
	(80 man hours)		
	1 supervisor	40 hours	550.00
			<u>\$4,415.00</u>
C.	Four (4) Storage Tanks		
	Crane 18 tons, 3 days	1,270.00	
	6 laborers, 5 days	3,180.00	
			<u>\$4,450.00</u>
D.	Final Rinse with D.I. water		
	Powerhouse operator, 16 hours	425.00	
E.	Samples assay cost		
1.	15 samples to corroborate the decontamination @ \$90.00/sample	1,430.00	
F.	Packing Cost of Refractory		
1.	Refractory container cost (40 drums)	265.00	
2.	Cleaning of the area		
	4 laborers, 8 hours (32 man hours)	510.00	
			<u>\$775.00</u>
G.	Cleaning Cost		
1.	Cutting of metal pieces		
	2 welders, 24 hours (48 man hours)	765.00	
2.	Cleaning of the area		
	4 laborers, 8 hours (32 man hours)	510.00	
			<u>\$1275.00</u>
H.	Shipping Costs		
1.	Refractory	215.00	
2.	Metal pieces	800.00	
			<u>\$1015.00</u>
	Total III		<u>\$17,185.00</u>

IV. Disposal of hazardous waste drums offsite

(1) 50,000 gallons -900 drums
Drums fee = \$120/drum. This price
includes land and ocean freight. \$114,480.00

V. Licensed Engineer
Taken \$50/hr. , 5 days
(inspection period) \$2,150.00

VI. Miscellaneous
Contractor Supervisor for all activities \$3,975.00
150 hours (\$25/hr) 1,600.00
Safety Equipment and supplies 1,350.00
Contingency for extra cleaning if
necessary
Total VI \$6,925.00

Grand Total Closure Plan: \$413,270.00
or
\$415,000.00

The latest closure cost estimate will be kept on file at Mayaguez. It will be revised whenever a change in the closure plan affects the cost of closure. It will be adjusted annually from the date of its original development to reflect changes in closure costs brought about by inflation. The Department of Commerce's Annual Implicit Price Deflator for Gross National Product will be used to make this adjustment.

I-4: Financial Assurance Mechanism for Closure

(122.25(a)(15);264.143)

Eli Lilly and Company has submitted in accordance with 40 CFR 264.143 (f) a financial test and corporate guarantee for closure for Eli Lilly Industries Inc. Eli Lilly and Company as parent

corporation of Eli Lilly Industries Inc., has satisfied the requirements of the section by demonstrating that it passes a financial test as specified in the section and guarantees closure through the corporate guarantee specified in the section. A copy of the financial assurance mechanism is in Appendix II.

I-5: Post Closure Cost (Reserved) (122.25(a) (16)

I-5a: Trust Fund

Not applicable.

I-6: Financial Assurance for Post Closure (Reserved)
(122.25(a) (16)

Not applicable.

I-7: Liability Requirements (122.25(a) (17); 264.47(a);
264.14)

Eli Lilly and Company has submitted in accordance with 40 CFR 264.147 (f) a financial test for the required liability insurance for Eli Lilly Industries, Inc. Eli Lilly and Company as parent corporation of Eli Lilly Industries, Inc., has satisfied the requirements of the section by demonstrating that it passes a financial test for liability coverage as specified in the section. A copy of the financial assurance mechanism for

✓ 10/28/81

October 28, 1981

On July 3 of the current year, I visited Eli Lilly and Company, Inc. located on Road Number 2, Km. 146.7, Bo. Sabanita, Mayaguez, Puerto Rico. (Refer to attachment #4, Location Plan).

This inspection was performed as a consequence of the first inspection made on March 11, 1981, in which I found that the industry stores large quantities of hazardous waste. It was also in order to comply with a Full RCRA Interim Status Inspection.

During the inspection I met with Mr. Vicente Díaz, Project Engineer of the above mentioned company. From the interview the following information was gathered:

Eli Lilly and Company, Inc. of Mayaguez is part of an industrial pharmaceutical complex, which is constituted by two (2) companies, Eli Lilly Industries, and Eli Lilly and Pharmaceutical Company, all of them located in Carolina, Puerto Rico. (On July 1, 1981, our program received a letter dated on June 19, 1981 and signed by Mr. Gordon F. Bird, which indicated that this industrial pharmaceutical complex effective on June 30, 1981 will be owned Eli Lilly Industries). The matrix company is Eli Lilly and Company located in Indianapolis, Indiana, U.S.

The Eli Lilly Industries of Mayaguez EPA identification number is PRT000010000.

The general process of the industry is based in the preparation of pharmaceutical products (medical products) such as:

1. Propoxyphene Hydrochloride
2. Propoxyphene Napsylate
3. Dextro Carambol Base
4. Acetohexamide, and
5. Erythronycin Estolate

The raw materials are processed through the usual reactions, distillations, extractions, separations and drying processes to produce intermediates and final products, which are finally sent to its matrix company in Indiana, U.S.

Eli Lilly Industries of Mayaguez notified as generators of hazardous waste and TSD facility. Among the hazardous waste generated I can mention.

1. acetone
2. ethyl ether
3. toluene
4. ethyl acetate
5. methylene chloride
6. methanol
7. Benzyl Chloride
8. Amyl Acetate
9. Ethyl alcohol
10. ciclohexylamine
11. hexane

(For item no. and estimated yearly in gal/yr., please refer to attachment #2).

Actually, the industry generates only:

- | | |
|------------------|---------------|
| 1. acetone | 11,420 gal/wk |
| 2. ethyl ether | 265 gal/wk |
| 3. toluene | 1,110 gal/wk |
| 4. ethyl acetate | 3,000 gal/wk |

(These quantities are approximates)

If you refer to attachment #5, Schematic diagram of production facilities, we can observe the general process in which these chemical substances are used. It indicates how they are used, stored, recovered and disposed in the Waste Treatment Plant.

At respect, the industry has a biological treatment plant which consist of: 1. three (3) storage tanks, A, B, and C; 2. Neutralization Pits; 3. Equalization Lagoon (45,000 gals); 4. Oxidation Lagoon (192,000 gals); 5. Clarifier (28,184 gals); 6. Chlorination Tank; 7. Thickner (11,936 gals) and; 8. sludge filters. (Refer to attachment #6, Waste Water Treatment Facility).

Tank A is used for acid solutions and tank B for caustic solutions. Control flow from Tanks A and B is neutralized in a pit and passed through an equalizer. After equalization, waste flow is diluted with well water and dumped in the Oxidation Lagoon, where biological degradation takes place. From the Oxidation Lagoon, Control Mixed Liquor enter to the clarifier, where the clear water flows to a Chlorination Tank. After chlorination, water is discharged to the Sanco River. (They do a analysis of this water, refer to attachment #7, waste effluent discharged to the river). This analysis includes the following parameters:

1. C.O.D.
2. BOD₅
3. TSS
4. TRN
5. TGC
6. Ph

It is performed each day of operation (a copy of their record, was requested, attachment #7). The concentrated mixed Liquor of the Clarifier is pumped back to the Oxidation Lagoon and to the thickener. From the thickener, the sludge is filtered through two (2) Door Oliver Vacuum Filters. The Solid is placed in container and disposed of in the Mayaguez Municipal Landfill. The filtrated residue is pumped back to the Equalization Lagoon.

They sample the different sections of the treatment plant. This analysis are made at 9:00 A.M., 1:00 P.M., 5:00 P.M. and 9:00 P.M. (refer to the attachment #8 and 9) each day of use. The sludge generated from this treatment plant was analyzed by Orlando Laboratories, Inc., in Florida, (refer to attachment #1). It revealed that this waste is not hazardous. (Refer to attachment #10, Letter sent to U. S. Environmental Protection Agency, RE: Petition of Hazardous Waste Delisting, which explain this aspect in more details).

In regard to the other wastes generated, they have been stored in steel drums, 55 gallons each, since 1974. Refer to attachment #11 and 12 where you can see the storage area. The tanks that are marked with an X, are the two (2) tanks with dikes of 12,000 gallons. These tanks are used to store solvents which are finally incinerated. The solvents of smaller concentration (diluted) are stored in steel drums in the Drum Storage area. (Refer to attachment #12, figure 3).

Actually, they are not storing in drums. Since November 19 of the last year, they have been storing in the superficial tanks (8' diam) above mentioned for incineration.

At the time of the inspection they were constructing a Drug Storage Area. (Refer to attachment #11 and 12). It has dimensions of 40' x 100', a dike and a collection dike for spill, which connect with the hazardous waste storage tank. This area is outdoors, and near it there is a fire hose in case of emergency.

In the area there were stored approximately (800) eight hundred 55 gallons steel drums. As I mentioned previously, they have hazardous waste since 1974. Now they are changing the damaged corroded steel drums for new ones and labelling them for storage. Finally they incinerate them. If you refer to attachment #13, you can observe the hazardous waste list, quantity, physical state, kind of containers and condition and the identification. These are the only documents that the industry has of their hazardous waste.

They use an internal condification system for that, for example:

A- 1 is acetone residues from T-30 (T-30 is a process).

The industry has a Brule incinerator and a thermal research incinerator (for final disposal methods). All wastes incinerated comes from the above mentioned hazardous waste tanks. The only documents that they have at respect, is the attachment #14, Fuel Consumption and percent Sulfur content report, and the attachment #15 for Brule incinerator, which is a small record of the operational hours.

During the inspection I observed that one of the hazardous storage tank was leaking. Mr. Díaz gave instructions for reparations.

At the time of the inspection, the industry had only received one shipment from Eli Lilly Industries of Carolina. It consisted of: flammable liq. NOS, liq. 220 gallons, 1905. I requested a copy of the manifest used, but Mr. Díaz could not find it. I had previous knowledge of the existence of this manifest, because we have copy of it in our office. If you refer to attachment #3, Hazardous Waste Manifest, you can see an example of the manifest used by the company. It has all the requirements required in the manifest system.

In relation with the documents requested in part 265 (Standards for owners and operators of hazardous waste treatment, storage and disposal facilities) of the Federal Register of May 19, 1980, Eli Lilly of Mayaguez did not have the following documents:

- 1) Written Waste analysis plan
- 2) Operating Record of the Hazardous Waste Treatment, Storage and Disposal

- 3) Closure Plan
- 4) General Inspection Records for treatment, storage and disposal of hazardous waste
- 5) Revision of the most recent chemical analysis performed of their hazardous wastes
- 6) Documentation on personnel training on hazardous waste handling

All these sections are articles of the above mentioned Federal Register. Since the industry does not have these documents, we consider the industry to be in violation of Part 265, of the Federal Regulation.

When I finish the interview, Mr. Díaz requested the address of some place in which he could find audio visual material for personnel training. In reference to this, the following material source was found:

National Audiovisual Center
General Services Adm.
Washington D.C. 20409

for example,

Slide Presentation:

Attack on Hazardous Waste
Challenger of the 80's -- US EPA
AO 3106 - 8900

Recommendations:

We will send a letter to Mr. Vicente Díaz, Project Engineer of Eli Lilly Industries in Mayaguez, with the purpose of informing him about the following:

- 1- Perform a re-inspection with the purpose of investigating the status of this facility (hazardous waste storage area).
- 2- Inform to Mr. Díaz that he can obtain the information (Personnel Training) requested to Mr. Sanabria during the inspection in the following address:

National Audio Visual Center
General Services Adm.
Washington, D.D. 20409

7-1c
October 28, 1981

Mr. Vicente Díaz, P.E.
Eli Lilly Industries, Inc.
Road #2 Km. 146.7
G.P.O. Box 1748
Mayaguez, Puerto Rico 00708

Dear Mr. Díaz:

RE: Notification of
Violation

In reference to the Full RCRA Interim Status Inspection performed on July 8, 1981 by technical personnel of the Solid, Toxic and Hazardous Waste Program, the following documents were not available at the time the inspection took place.

1. Written waste analysis plan.
2. Operating Record of the Hazardous Waste Treatment, Storage and Disposal.
3. Closure and Part-Closure Plan.
4. General Inspection Reports for Treatment, Storage and Disposal of Hazardous Waste.
5. Revision of the most recent chemical analysis performed of your hazardous waste.
6. Documentation on personnel training on hazardous waste handling.

Recommendation:

1. Perform a re-inspection with the purpose of investigating the status of this facility. (hazardous waste storage area).
2. Inform to Mr. Díaz the address in which he can obtain the information of Personnel Training requested to Mr. Sanabria during the inspection. The address is:

National Audio Visual Center
General Services Adm.
Washington, D.C. 20409

Slide Presentation:
Attack on Hazardous Waste
Challenge of the 80's
U.S. EPA
AO 3166 - SS00

TS/eas

Name of Facility - Eli Lilly Industries, Mayaguez

RCRA ID Number - PRT000040066

Date of Inspection - July 8, 1981

Type of Inspection: Generator X Transporter

TSD X

Name of EPA/State Inspector -

Mr. Tomás Sanabria González, Chemist
Hazardous Waste Bureau
Environmental Quality Board
Santurce, Puerto Rico

Findings of Inspection:

The industry has large quantities of hazardous waste. They are stored in steel drums of 55 gallons since 1974. Actually, they are constructing a hazardous waste storage area for this waste. Among the waste that is generated I can mention: acetone, 11,420 gal/wk; ethyl ether 265 gal/wk; toluene 1,000 gal/wk; acetate 3,000 gal/wk. These are biodegraded in its water Treatment Plant.

On letter dated on March 20, 1981, we requested a chemical analysis of the solid sludge generated in this plant. It was performed by Orlando Laboratories Inc. in Florida. It revealed that this waste is non-hazardous. In regard to other hazardous waste that they have since 1974, they are changing the steel drums for new ones, and finally incinerated them.

At the time of inspection, the industry did not have some of the documentation required by part 265 (Standard for owners and operators of hazardous waste treatment, storage and disposal facilities) of the Federal Register of May 1980. Therefore is in violation to the above mentioned Regulation.

Action(s) Taken:

Action(s) Recommended:

51.4.1. 1315
51. ~~51~~ 1.3.7
ELI LILLY

Commonwealth of Puerto Rico
PUERTO RICO AQUEDUCT & SEWER AUTHORITY

September 22, 1987

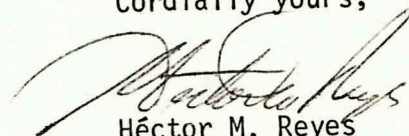
Mr. Jonn Inglis
160 Chupb Ave.
Lynohurst, New Jersey 07071

Dear Mr. Inglis:

Enclose you will find the topographic maps which indicates the location of the wells around the facilities you request from us.

They are already identifies in each map by written notes on the sames.

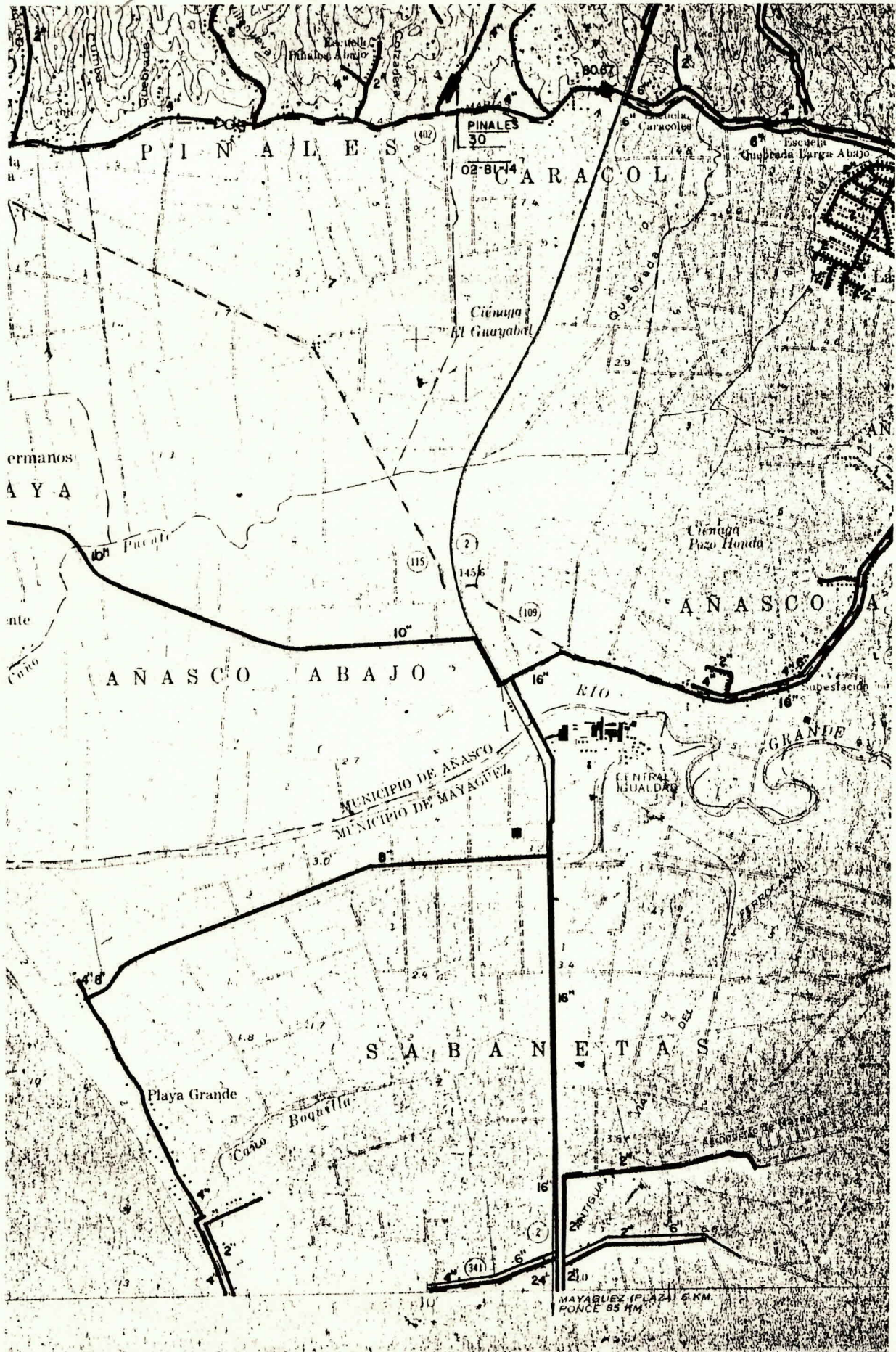
Cordially yours,



Héctor M. Reyes
Chief, Aqueduct Department

Enclosure

ELI LILLY - MAYAGÜEZ
NO WELLS CLOSE TO THIS AREA



COMMONWEALTH OF P.R.
AQUEDUCT AND

PUMP STATION